NIKOLAYEVA, V.G.; RYABOV, M.N.; IVANYUKOV, D.V.; POPOVA, E.M.; SAMGIN, I.B.; ZLOTNIKOV, L.Ye.; DZHINCHARADZE, V.M.; SEN'KINA, M.I.; Prinimali uchastiye: KRYMOVA, N.N.; MALINOV, V.K.

Refining of heavy residual fuels by washing and separation. Khim.i tekh.topl.i masel 7 no.5:26-31 My '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva, Moskovskiy neftepererabatyvayushchiy zavod i Vsesoyusnyy nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashinostroyeniya. 2. Moskovskiy neftepererabatyvayushchiy zavod (for Krymova, Malinov).

(Petroleum as fuel)

IVANYUKOV, D.V.; OROCHKO, D.I.

Catalytic processes in petroleum refining. Khim. i tekh. topl i masel 9 no.8:70-72 Ag '64. (MIRA 17:10)

L 23007-66 EWT(m)/T DJ/WE

ACC NR: AP6007670 (A) SOURCE CODE: UR/0413/66/000/003/0043/0043

AUTHOR: Terteryan, A. B.; Ivanyukov, D. V.; Agayeva Aga-Kyzy, S. M.; Grachev, D. S.; Yermokhin, V. V.; Ismailov, A. G.; Kupriyanova, L. A.; Nadirova, M. N.; Terteryan, S. A.

24
B

ORG: none

TITLE: Deparaffination of distillate petroleum products. Class 23, No. 178435

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 43

TOPIC TAGS: deparaffination, petroleum product, petroleum refining

ABSTRACT: An Author Certificate has been issued for a method describing the dewaxing of petroleum products using carbamides. The carbamide is introduced in the form of a solution in isopropyl alcohol during the process for separating normal paraffin hydrocarbons. The latter is carried out without the use of filters. [LD]

SUB CODE: 11/ SUBM DATE: 11Jul57

2

Card 1/1

UDC: 665.545.3:547.495.2

IVANYUKOV, M.V., zaslushennyy vrach RSFSR; glavnyy vrach; KHROMOVA, A.I., glavnyy [redacted] vrach.

Defects in the architectural planning of hospital buildings. Gor.khoz.Mosk. 27 no.11:5-6 N '53. (MIRA 6:11)

1. 4-y Gorodskoy klinicheskoy bol'nitsy (for Ivanyukov). 2. 2-y Gorodskoy klinicheskoy bol'nitsy (for Khromova). (Moscow--Hospitals)

ARTSYBASHEV, V.A.; IVANYUKOVICH, G.A.

Studying the spectrogram energy spectra of the point source of gamma rays. Vop. rud. geofiz. no.5:52-62 '65.

Transformation of a spectrogram gamma-ray spectra into true energy spectra. Ibid.:63-67 (MIRA 18:9)

KOTSAREV, V.N., Gvardii podpolkovnik meditsinskoy sluzhby; MENADZHIYEV,
R.E., Gvardii mayor meditsinskoy sluzhby; IVANYUSHENKO, V.M.

Identification of atypical dysentery cultures by the keratoconjunctival test. Voen.-med.zhur. no.4:84 Ap '60. (MIRA 14:1)
(SHIGELLA)

IVANYUSHIN, G.

Suction line attached to pumps for taking in liquid from small troughs and channels. Zhil.-kom. khoz. 12 no.10:29-30 O '62. (MIRA 16:2)

1. Nachal'nik tsekha Lyublinskoy stantsii aeratsii.
(Intakes (Hydraulic engineering))

GAVRILOV, N.V.; BOLOTINA, O.T.; IVANYUSHIN, G.I.; VINOKUROVA, Ye.B.,
red.izd-va; SHLIKHT, A.A., tekhn.red.

[Automatic remote control units at the Lyublino Aeration
Plant] Elementy avtomaticheskogo distantsionnogo kontrolia
i upravleniia na Liublinskoi stantsii aeratsii. Moskva,
Izd-vo M-va kommun.khoz.RSFSR, 1959. 62 p. (MIRA 12:10)
(Lyublino--Sewage--Purification) (Remote control)

IVANYUSHIN, G.I., inzh.

Experience with air-lift units in a system of aeration structures.
Vod. i san. tekh. no.7:23-25 Jl '62. (MIRA 15:9)
(Water--Aeration)

IVANYUSHIN, G.I., inzh.

Operation of the Lyublino aeration station in 1963. Vod.i san.tekh. no.12:28-31 D '65. (MIRA 19:1)

IVANYUSHIN, S.F.

Making use of the spinnability of mixture componets in cloth manufacture. Tekst. prom. 19 no.11:28-30 N '59. (MIRA 13:2)

1. Nachal'nik apparatno-pryadil'nogo tsekha Alma-Atinskoy sukonnoy fabriki.
(Woolen and worsted spinning)

IVANYUSHIN, S.F.

Automatic cutoff of the spinning machine during yarn tyings. (MIRA 13:9)
Tekst.prom. 20 no.8:56-57 Ag '60.

1. Nacahl'nik apparatno-pryadil'nogo tsekha Alma-Atinskoy sukonnoy fabriki.
(Spinning machinery)

IVANYUSHIN, S.F.

Efficiency of the use of the wire surface on the main carding cylinder.
Tekst. prom. 23 no.9:44-48 S '63. (MIRA 16:10)

1. Glavnyy spetsialist tekstil'noy promyshlennosti Gosudarstvennogo komiteta Soveta Ministrov Kazakhskoy SSR.
(Carding machines)

IVANYUSHIN, Ye. P., and KULIKOVA, K, N.

"Heat Treatment of Cast Carbon Steel 25L and 20L." From the book, "Heat Treatment and Properties of Cast Steel." edited by N. S. Kreshchanovskiy, Mashgiz, Moscow, 1955.

IVANYUSHIN, [illegible]

4

✓3643* M[illegible] [illegible] and Microstructure of Steels 25L and 2[illegible] [illegible] Ivanyushin. Mekhanicheskie svoistva i mikrostruktura stali 25L i 20L v zavisimosti ot termoobrabotki [illegible]

1

IVANYUSHIN, Ye. P. (Engr.) KULIKOVA, K. N.

"Selection of Optimum Heat-Treating Conditions."

in book - Improving the Quality of Steel Castings; Transaction of the All-Union Conference, Moscow, Mashgiz, 1958. 214 p. ([illegible])

The following are investigated for their effect on the mechanical properties and microstructure of steel castings. 1) low-temperature annealing and normalization 2)higher-temperature anneling and normalization, with holding at temperature for various periods of time 3) rate of cooling. In addition, the effect of heat-treating conditions on the plastic properties of steel is studied.

IVANYUSHKIN, A. G.

Ivanyushkin, A. G. - "Functional study of the kidneys in a surgical clinic," In the symposium: V. N. Shamov, Kiev, 1949, p. 305-11

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

R

USSR

✓Purification of cellulose by fractionation of the fibers. S. L. Talmud, A. M. Ivanyushkina, L. A. Popova, and L. P. Yanuvaeva (V. M. Molotov Technol. Inst., Lenintarry materials; heat resistance, etc., are also improved [illegible]

Koskinen, C.A. 33, 710[illegible]), Elisabeth Barabas

[illegible]

YERASHOVA, N.A.; IVANYUSHKINA, A.M.

Practice of utilizing webs of semi-serge texture. Bum.prom.30 no.10:26 O '55. (MLRA 9:1)

1.Nachal'nik laboratorii pervoy Leningradskoy bumazhnoy fabriki (for Yerashova). 2. Smennyy master tsekha no.1 fabriki (for Ivanyushkina). (Leningrad--Paper industry)

USSR/Chemical Technology - Chemical Products and Their Application. Wood Chemistry Products. Cellulose and Its Manufacture. Paper, I-23

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63381

Author: Dymarchuk, N. P., Ivanyushkina, A. M., Popova, L. A., Talmud, S. L.

Institution: None

Title: Concerning the Problem of Resin Trouble in the Manufacture of Paper and Methods for Its Control

Original Periodical: Zh. prikl. khimii, 1956, 29, No 4, 610-617

Abstract: Elimination of carbonate hardness of water does not decrease the amount of resin which passes from the fiber into the liquid phase. Resin trouble at paper mills can be eliminated (in part or fully) by adding acid or alumina into the hollanders, to coagulate the resin. On using $Al_2(SO_4)_3$ as coagulant the resin emulsified in the pulp and water of paper manufacture is not completely coagulated or requires very large amounts of coagulant. Most advantageous conditions of resin coagulation in the pulp and circulating water of paper manufacture are provided by combined use of $Al_2(SO_4)_3$ and $Ca(OH)_2$.

Card 1/1

SHAMRAY, Ye.F., prof.; IVANYUT, O.M., aspirant.

Physiological interrelationship of vitamins C and P and adrenal cortex hormones. Probl. endokr. gormonoter. 9 no.4:3-6 Jl-Ag'63 (MIRA 17:1)

1. Iz kafedry biologicheskoy khimii (zav. - prof. Ye.F. Shamray) Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo instituta imeni akademika A.A. Bogomol'tsa.

IVANYUTA, E.I.; FINKEL'SHTEYN, R.M.

Determining the frequencies of free vibrations of a cylindrical shell with elliptic cross section. Issl.po uprug.i plast. no.1:46-51 '61. (MIRA 15:2)
(Elastic plates and shells--Vibration)

IVANYUTA, E.I.; FINKEL'SHTEYN, R.M.

Determining the frequencies of the free vibrations of cylindrical shells. Issl. po uprug. i plast. no.2:81-89 '63. (MIRA 16:8)
(Elastic plates and shells--Vibration)

IVANYUTA, E.I.; FINKEL'SHTEYN, R.M.

Axisymmetric vibrations of cylindrical shells. Issl. po uprug. i plast. no.2:90-104 '63. (MIRA 16:8)
(Elastic plates and shells--Vibration)

IVANYUTA, E.I.; FINKEL'SHTEYN, R.M.

Effect of tangential inertial forces on the frequency of free vibrations of a thin cylindrical shell. Issl. po uprug. i plast. no.2:212-215 '63. (MIRA 16:8)

(Elastic plates and shells—Vibration)

IVANYUTA, E. I. (Leningrad); FINKEL'SHTEYN, R. M. (Leningrad)

Using a variational method in solving certain problems in the theory of shells. Prykl. mekh. 9 no.1:42-51 '63. (MIRA 16:4)

1. Leningradskiy gosudarstvennyy universitet.

(Elastic plates and shells)

IVANYUTA, I.D. (Kiyev)

Sylov p-subgroups of a denumerable symmetrical group. Ukr. mat. zhur. 15 no.3:240-249 '63. (MIRA 16:12)

IVANYUTA, I.D. (Kiyev)

Sylow p-subgroups of a topological group of all substitutions of a denumerable set. Ukr. mat. zhur. 16 no.5:602-609 '64. (MIRA 17:10)

IVANYUTA, L.I.

Clinical experimental data on the contraceptive properties of ascorbic acid. Akush. i gin. 40 no.5:119-122 S-O '64. (MIRA 18:5)

1. Otdel fiziologii beremennykh (rukovoditel' - prof. V.P.Mikhedko) i laboratorii po izyskaniyu i izucheniyu protivozachatochnykh sredstv (rukovoditel' - kand. med. nauk A.I.Motrenko) Ukrainskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva imeni P.M.Buyko (dir. - kand. med. nauk A.G.Pap), Kiyev.

IVANYUTA, M.M.; KOVAL'CHUK, N.R.; MALAKHOV, V.F.

Oil yield factors of the depleted pools of the Cis-Carpathian region. Nefteprom. delo no.1:6-8 '65. (MIRA 18:3)

1. Ukrainskiy nauchno-issledovatel'skiy geologorazvedochnyy institut.

L 05143-67 EWT(1)/FCC GW

ACC NR: AR6017547 SOURCE CODE: UR/0169/66/000/001/D014/D014

7

AUTHOR: Parkhomovskiy, O.A.; Andreyeva, R.I.; Burakovskiy, L.Ye. Goncharova, T.A.; Grigor'yeva, A.I.; Ivanets, N.I.; Ivanyuta, M.M.; Kozar, L.T.; Raykher, L.D.; Senina, A.S.; Tkachenko, Zh. Ya.; Tkhir, D.G.

TITLE: Determination of the development level of the technique and technology of geological prospecting for oil and gas in the Ukraine

SOURCE: Ref. zh. Geofizika, Abs. 1D97

REF SOURCE: Tr. Ukr. n.-i. geologorazved. in-t, vyp. 10, 1965, 10-17

TOPIC TAGS: prospecting, seismic prospecting, ~~oil prospecting~~, gas ~~prospecting~~, PETROLEUM, magnetometer, gravimetry / M-2 MAGNETOMETER, UKRAINE

ABSTRACT: Geological-geophysical prospecting for oil and gas, completed on the Ukraine during 1960-1962 was analysed. At present all the oil-bearing territory of the Ukraine is covered by prospecting survey with the M-2 magnetometer. The cost of study was 46.4 roubles/km^2. The output and precision of the aeromagnetic survey is much better. The gravimetric survey is basically complete. The cost of the total survey was 92.2 roubles per km^2 in 1960 and 47.2 roubles in 1962. Highly precise gravimeters (.01 - .03 mgal) can elucidate various anomalies. Inspite of the relative cheapness of of the electro-recon method, and its mobility, it has not been afforded the deserved development in the Ukraine. Volume of seismic work reaches 87% of the total geophysi-

Card 1/2 UDC: 550.830(477)

L 06143-67

ACC NR: AR6017547

cal work volume. Cost of 1 km of seismic profile work was 560-850 roubles. In 1962, seismic reconstructing instrumentation for the automatic processing of seismograms and design of boring sections has been developed. Techno-economical indices of structural mapping boring are very high; those of structural-recon boring are at relatively low levels. On the basis of consideration of the possibilities of each method, a methodology for the recon of oil and gas is proposed. Translation of abstract

SUB CODE: 08

Card 2/2 mte

SHAMRAY, Ye.F., prof.; IVANYUTA, O.M.

Physiological interaction between vitamins C and P and the harmones of the adrenal cortex. Vrach.delo no.3:29-33 Mr '63.
(MIRA 16:4)

1. Kafedra biologicheskoy khimii (zav. - prof. Ye.F.Shamray) Kiyevskogo meditsinskogo instituta.
(ADRENOCORTICAL HORMONES) (VITAMIN--P) (ASCORBIC ACID)

IVANYUTA, O.M. [Ivaniuta, O.M.]

Carbohydrate-phosphorus metabolism in the skeletal muscle of adrenalectomized animals during treatment with cortisone and vitamins C and P. Ukr. biokhim. zhur. 35 no.1:20-34 '63 (MIRA 17:5)

SHAMRAY, Ye.F. [Shamrai, IE.F.]; IVANYUTA, O.M.; PLATONOV, O.M.

Content of various forms of ascorbic acid in the tissues of epinephrectomized animals. Ukr. biokhim. zhur. 37 no.2:269-273 '65. (MIRA 18:6)

1. Kafedra biokhimii Kiyevskogo meditsinskogo instituta.

IVANYUTA, V. M.

Slide Rule

Logarithmic slide rule for forestry work. Les. khoz. 5 No. 4 (43), 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 1952 Uncl.

IVANYUTA, V. M.

Forestry

Dissertation: "Methods of Commercial Evaluation of Woodfall Stock." Cand Agr Sci, Moscow Forestry Engineering Inst, 31 Mar 54. (Vechernyaya Moskva, Moscow, 22 Mar 54)

SO: SUM 213, 20 Sept 1954

IVANYUTA, Vitaliy Mikhaylovich

[Valuation mensuration of forests] Izmeritel'naia taksatsiia lesa. Moskva, Lesnaia promyshlennost', 1964. 147 p.
(MIRA 18:5)

IVANYUTIN, M.I.

E-1

USSR / Analytical Chemistry. General Problems.

Abs Jour: Ref. Zhur - Khimiya No. 2, 1958, 4261

Author : Busev, A.I., Ivanyutin, M.I., Turchinsky, M.F.

Inst : Moscow University

Title : Dialkyl-and Diaryldithiophosphoric Acids As Analytical Reagents. Information 2. About Diphenyldithiophoshoric Acid and Some of Its Salts.

Orig Pub: Vestnik Mosc. un-ta. ser. matem., mechan., astron., fis., khimi, 1957, No 2, 177-182

Abstract: The synthesis of diphenyldithiophosphoric acid $(C_6H_5O)_2PSSH$ from phenol and P_2S_5 was developed. The properties of this acid are described in more detail. The following compounds have been

Card 1/3

IVANYUTINA, M. I.

AUTHOR: Bilimovich, G. N. SOV/75-14-4-30/30

TITLE: Section of Analytical Chemistry of the VIII Mendeleyev Congress on General and Applied Chemistry

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 511-512 (USSR)

ABSTRACT: Approximately 300 persons participated in the work of the Department of Analytical Chemistry, among them representatives of various scientific research institutes, higher schools and industrial enterprises in Russia, scientists from China, Bulgaria, the ČSR, Poland, Hungary, and Italy. Approximately 70 reports were heard. In his opening speech I. P. Alimarin reported on the achieved results and on modern problems of analytical chemistry. I. V. Tananayev reported on the application of physico-chemical analysis in heterogeneous systems for the solution of a series of problems of analytical chemistry. V. I. Kuznetsov reported on modern aims in the use of organic reagents; A. K. Babko showed at the example of halide and thiocyanate complexes the correlation between the stability of complexes and the position of the corresponding central atoms in the periodic system. V. M. Peshkova and V. M. Bochkova lectured on the stability of oximates of Cu, Co, and Ni as depending on the structure of the oxime molecule. V. P. Toropova lectured on the double character of reaction of some compounds in the formation of complexes. The problem of the application of heteropolyacids in analytical chemistry was dealt with in the lectures of Z. F. Shakhova and co-workers, and A. I. Kokorin and N. A. Polotebnova. A large number of lectures dealt with the use of new organic reagents in analysis: A. I. Busev and M. I. Ivanyutin reported on the application of dialkyl and diaryl ~~dithio~~ phosphoric acid for the separation of elements, A. I. Portnov used aryl arsonic acid and aryl phosphinic acid. R. P. Lastovskiy and his co-workers treated some properties of new complexons. The lectures of V. A. Nazarenko, G. G. Shitareva and A. I. Kononenko dealt with the photometric determination of a series of elements using fluorine derivates. A. T. Cherkesov lectured on the use of halochromation in analytical chemistry. E. M. Dobkina and T. M. Malyutina lectured on the determination of tantalum using differential spectrophotometry. Yu. V. Morachevskiy and L. A. Stolyarova reported on new highly sensitive analysis methods using an ultraviolet microscope. Several lectures dealt with methodical and theoretical problems of spectrum analysis (N. F. Zakhariy and G. A. Sheynin; E. Ya. Faynshteyn and co-workers). N. S. Poluektov and M. N. Nikonova treated the perfection of flame photometry. Several lectures dealt with the determination of elements by polarography (S. I. Sinyakova; E. N. Rozhdestvenskaya and I. A. Yarovoy; Ya. P. Gokhshteyn). New results in using fixed electrodes were reported by I. D. Panchenko and Yu. S. Lyalikov and co-workers. The lecture of N. I. Udal'tsova and P. N. Paley treated the use of amperometric titration with two electrodes in the chemistry of uranium and thorium. M. M. Senyavin showed possibilities of predicting the conditions of chromatographic separation of elements based on their position in the periodic system. T. A. Belyavskaya reported on the use of ion exchange in the investigation of the state of substances in solutions. A. S. Vernidub and V. I. Petrashen' lectured on the chromatographic separation of a series of elements. N. G. Polyanskiy reported on adapting the properties of ion exchanger resins. V. M. Chenyakin and associates reported on the chromatographic proof of sulfanilamide preparations in liquids of the organism. G. L. Starobinets and associates treated

Card 1/4

Card 2/4

Card 3/4

the application of high polymers in chromatographic analysis. The lecture of A. A. Zhukhovitskiy and N. M. Turkel'taub, O. Shay dealt with gas chromatography. Several lectures treated the use of radioactive isotopes for the chromatographic investigation of complex formation (D. I. Ryabchikov and associates), for the investigation of the co-precipitation mechanism of ions of rare metals with sulfides (N. A. Rudnev) and for determining rare elements by means of isotope dilution (I. P. Alimarin, G. N. Bilimovich). In the field of elementary organic microanalysis the lectures of M. O. Korshun, V. A. Gel'man and V. A. Klimova with associates have to be mentioned, who treated the elaboration of rapid micromethods for the simultaneous determination of several elements from one weighed portion of boron, fluorine and silicium-organic compounds.

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IVANYUTIN, M. I. Cand Chem Sci -- (diss) "Dialkyl- and diaryl-dithiophosphoric acids as analytical reagents." Mos, 1958. 20 pp (Min of Higher Education USSR. Mos Order of Lenin and Order of Labor Red Banner State Univ im M. V. Lomonosov. Chem Faculty. Chair of Analytic Chemistry), 100 copies (KL, 11-58, 113)

AUTHORS: Ivanyutin, M. I., Busev, A. I. SOV/156-58-1-18/46

TITLE: The Determination of Bismuth by Means of Gravimetrical, Titrimetrical, and Photometrical Methods (Opredeleniye vismuta gravimetricheskim, titrimetricheskim i fotometricheskim metodami)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 1, pp. 73 - 78 (USSR)

ABSTRACT: The authors mentioned already earlier that bismuth may be separated quantitatively from acid solutions by means of diethyl-dithiophosphoric acid. On the basis of this reaction various determination methods of bismuth can be worked out. The greenish-yellow precipitation which is formed has a melting point at 55° and a stable composition. The determination method of the composition of the bismuth diethyl-dithiophosphate and its solubility is given. In order to determine bismuth gravimetrically, the precipitation of the bismuth diethyl-dithiophosphate which is to a small extent soluble is slightly filtered off and rinsed. Bismuth is precipitated from a weak nitric- or sulfuric acid solution by an 1,2 - 1,5 fold excess of nickel diethyl-dithiophosphate solution. After filtering off of the precipitation by a glass filter Nr 2 or 3 and

Card 1/4

rinsing the dried product yields satisfying weight results (Table 1). Bismuth may be determined titrimetrically by visual titration by means of nickel diethyl-dithiophosphate. In the case of energetical shaking the bismuth diethyl-dithiophosphate forms nodules, the mother solution becomes clear, and the final product of the titration may therefore be easily determined. The results are given in table 2. It is convenient to titrate bismuth with nickel diethyl-dithiophosphate in the presence of thio-urea. Bismuth is separated from the solution quantitatively and the yellow precipitation together with the solution exhibits a tinge of green at the point of equivalence. Most elements of the I^{st} - V^{th} analytical groups do not disturb the bismuth determination. In contrast to this high ion concentrations (Ni^{2+}, Co^{2+}, Cr^{3+}) as well as chlorides are disturbing. Small quantities of antimony do not disturb. Table 3 gives titration results of bismuth (concentration 0,02 - 0,002 mol/1). Bismuth may be titrated potentiometrically with a platinum indicator electrode covered with mercury. There is a clear change in potential in the point of equivalence (Table 4). A highly sensitive photometrical

The Determination of Bismuth by Means of Gravimetrical, Titrimetrical, and Photometrical Methods SOV/156-58-1-18/46

bismuth determination is possible in the ultraviolet range at 330 mμ. Disturbances which are caused by the great number of elements which form the extractible diethyl-dithiophosphates are possible here (Fig 2). The measurement of the absorption of bismuth diethyl-dithiophosphate solution makes possible the determination of 0,05 - 0,3 mg Bi in pure solutions or in the case of absence of the above mentioned elements (Fig 5). The described determination methods worked out by the authors offer great advantages compared to those used hitherto (Ref 2). Finally the determination of bismuth, copper, and lead in the burnt dust of the processing works is described. There are 3 figures, 5 tables, and 2 references, both of which are Soviet.

ASSOCIATION: Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova (Chair of Analytical Chemistry of the Moscow State University imeni M.V. Lomonosov)

SUBMITTED: September 30, 1957

Card 3/4

5(1)

AUTHORS: Busev,A.I.,Ivanyutin,M.I. SOV/55-58-2-23/35

TITLE: Photometric Determination of Microquantities of Copper in Water, Ground and Biomaterials With the Aid of the Diethyldithiophosphate of Nickel (Fotometricheskoye opredeleniye mikrokolichestv medi v vodakh, pochvakh i biomaterialakh s pomoshch'yu dietilditiofosfata nikelya)

PERIODICAL: Vestnik Moskovskogo Universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii,1958, Nr 2,pp 177-182 (USSR)

ABSTRACT: It is stated that the ditiophosphates are selective, highly sensitive and convenient reagents for photometric determination of small quantities of copper in many materials. The authors propose a method for the proof of copper in water, ground and several cereals.

There are 8 references, 5 of which are Soviet, 2 German, and 1 American.

ASSOCIATION: Kafedra analiticheskoy khimii (Chair of Analytic Chemistry)

SUBMITTED: April 15, 1957

Card 1/1

IVANYUTIN, M. I.

AUTHORS: Busev, A. I., Ivanyutin, M. I. 75-[illegible]-3/26

TITLE: Dialkyl- and Diaryl-Dithiophosphoric Acids as Analytical Reagents
(Dialkil - i diarilditiofosfornyye kisloty kak analiticheskiye reaktivy)
Communication 3. Determination of Palladium With the Aid of Nickel or Potassium Dialkyl- and Diaryl-Dithiophosphates
(Soobshcheniye 3. Opredeleniye palladiya pri pomoshchi dialkil - i diarilditiofosfatov nikelya ili kaliya)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1958, Vol 13, Nr 1, pp 18-30 (USSR)

ABSTRACT: The authors' results of investigation may be summarized as follows:
1.Dialkyl and diaryl dithiophosphates quantitatively precipitate palladium from acids, neutral and alkaline solutions which contain complex-forming substances. By investigating the reaction between the palladium ion and diethyldithiophospheric acid by different methods it was found that this reaction under different conditions always proceeds according to the equation:

Card 1/5

Dialkyl- and Diaryl-Dithiophosphoric Acids as Analytical Reagents. 75-1-3/26
Communication 3. Determination of Palladium With the Aid of Nickel or Potassium Dialkyl- and Diaryl-Dithiophosphates

$$PdCl_2 + (C_2H_5O)_2PSS\ _2Ni = (C_2H_5O)_2PSS\ _2Pd + NiCl_2 \qquad (1)$$

2. The diethyl and the dimethyl dithiophosphate of palladium satisfies all conditions of a method of determination with regard to the form of the precipitate and weighability. A gravimetric micromethod for the determination of palladium in the presence of platinum, nickel, iron, copper and other elements was worked out. In order to obtain platinum in solution, sodium bisulfite is added. The latter reduces platinum to the bivalent stage and keeps it in the solution by the formation of a stable complex. Iron, copper and lead are kept in solution by the addition of complexone III and by being alkalized ($p_H \sim 9$). This method yields sufficiently accurate and reproducible results.

3. The rapid course of the reaction between the intensively colored iodide-complexes of palladium and nickel-diethyldithiophosphate in an acid solution at room temperature according to equation (1) is in the end point accompanied by an abrupt change of color. Based on this principle a micromethod for the titrimetric determination

Card 2/5

of palladium was worked out is applicable in the presence of considerably predominant quantities of platinum and other elements. Platinum is also here masked by sodium bisulfite. This method may serve for the analysis of platinum - palladium alloys. In the presenne of copper this method is not applicable.

4. The solutions of the dialkyl and diaryl dithiophosphates of palladium in chloroform, carbon tetrachloride and other organic solvents are yellow-orange and are suitable for photometric determination. The absorption maximum of the palladium diethyldithiophosphate in carbon tetrachloride is at 295 $m\mu$ and almost coincides with the absorption maximum of the solutions of palladium-dimethyl, diisobutyl-, diphenyl- and dibenzyl-dithiophosphate. The value of the maximum for all dithiophosphates is in the same order of magnitude. The solutions of the palladium diethyldithiophosphate follow Beer's law at 295 $m\mu$, within the limits of 0,014 mg to 0,090 mg palladium per 25 ml CCL_4 (optical densities from 0,16 to 0,90). In photometric determination the optical density is measured at 295 $m\mu$. Yellow, more highly concentrated solutions of palladium diethyldithiophos=

Card 3/5

Dialkyl- and Diaryl-Dithiophosphoric Acids as Analytical Reagents. 75-1-3/26
Communication 3. Determination of Palladium With the Aid of Nickel or Potassium Dialkyl-and Diaryl-**Dithiophosphates**

phate can be visually colorimetered or measured in a spectrophotometer at 340 mμ. In this case the solutions follow Beer's law within the limits from 0,16 to 1,1 mg palladium per 25 ml CCl_4 (corresponding optical data from 0,15 to 0,90). The elaborated photometric methods permit the determination of palladium in the presence of platinum, nickel, copper, gold, lead, antimony and other elements with satisfactory accuracy. The diethyldithiophosphates of lead and antimony also dissolve in carbon tetrachloride and would therefore disturb the photometric determination of palladium. They can, however, be removed by washing the carbon tetrachloride layer with lye. This method especially is of great practical importance in the determination of palladium in the presence of a large excess of lead.
There are 5 figures, 8 tables and 56 references, 20 of which are Slavic.

Card 4/4

Dialkyl-and **Diaryl**-Dithiophosphoric Acids as Analytical Reagents. 75-1-3/26
Communication 3. Determination of Palladium With the Aid of Nickel
or Potassium Dialkyl-and Diaryl - **Dithiophosphates**

ASSOCIATION: Moscow State University imeni M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

SUBMITTED: October 10, 1956

AVAILABLE: Library of Congress

1. Palladium - Determination 2. Dialkyl dithiophosphates - Chemical reactions 3. Diaryl dithiophosphates - Chemical reactions
4. Reagents - Applications

Card 5/5

AUTHORS: Busev, A. I., Ivanyutin, M. I. 75-13-3-10/27

TITLE: Dialkyl and Diaryl Dithiophosphoric Acids as Analytical Reagents (Dialkil- i diarilditiofosfornyye kisloty kak analiticheskiye reaktivy) Communication 4. Separation of Cadmium From Zinc and Other Elements. Gravimetric and Titrimetric Determination of Cadmium (Soobshcheniye 4. Otdeleniye kadmiya ot tsinka i drugikh elementov. Vesovoye i titrimetricheskoye opredeleniye kadmiya)

PERIODICAL: Zhurnal analiticheskoye khimii, 1958, Vol. 13, Nr 3, pp. 312-318 (USSR)

ABSTRACT: Diethyldithiophosphoric acid $(C_2H_5O)_2PSSH$ and its soluble salts quantitatively precipitate a number of heavy metals (Refs 1,2). The advantage as compared to dithiocarbamates and xanthogenates widely spread in analysis consists in the somewhat higher selectivity. Thus dithiophosphates do not precipitate the elements of the III-rd analytic group with the exception of Fe(III). This yields the possibility of a quantitative separation of cadmium from zinc and many other elements. Most of the determination methods for cadmium require the absence of zinc (Refs 5-9). There are very many methods (Refs 4,

Card 1/4

Dialkyl and Diaryl Dithiophosphoric Acids as Analytical Reagents. Communication 4. Separation of Cadmium From Zinc and Other Elements. Gravimetric and Titrimetric Determination of Cadmium. 75-13-3-10/27

10-15) for the separation of the two elements, but there is no simple, fast and exact method of separation which would be suitable for production control. In the present paper a comparatively fast gravimetric method of determination for cadmium in the presence of zinc and several other elements is worked out. The separation of cadmium is performed by precipitation with a 0,05 m solution of nickel-diethyldithiophosphate (Ref 1). Changes of the acid concentration (sulfuric or nitric acid) between 0 and 6 Mol/liter do not exert any influence upon the precipitation of cadmium. At high concentrations of nitric acid the anion of diethyldithiophosphoric acid is oxidized; in solutions more strongly acid than 6 Mol/l a decomposition of the reagent sets in. Cadmium diethyldithiophosphate is insoluble in mineral acids, but it is well soluble in organic solvents non-miscible with water which contain diluted acid, as well as in ammonia. The white precipitate consists of characteristic needles which may serve for a microcrystalloscopic proof of cadmium. Thus cadmium can still be proved in the presence of hundred-fold amounts

Card 2/4

Dialkyl and Diaryl Dithiophosphoric Acids as Analytical Reagents. Communication 4. Separation of Cadmium From Zinc and Other Elements. Gravimetric and Titrimetric Determination of Cadmium 75-13-3-10/27

of Cu, Pb and Bi at a dilution of cadmium of 1:50 000. The maximum dilution for the proof of cadmium is 1:150 000. The precipitate has the formula $[(C_2H_5O)_2PSS]_2Cd$. The melting point is 144°, the solubility in water at 18-20° $2{,}4 \cdot 10^{-4}$ Mol/l. The solubility product in water is $5{,}8 \cdot 10^{-11}$ (analogous to Ref 51). The precipitation of cadmium as diethyldithiophosphate is quantitatively performed from comparatively concentrated solutions with an excess of the precipitant. A saturated aqueous solution of cadmium diethyldithiophosphate serves as washing liquid. Zn, Fe(II), Al, Ga, Ni, Co, Cr, Mn, Mg, alkaline earth and alkali metals remain in the solution. Heavy metals which are precipitated by the reagent in an acid solution are disturbing. Foreign ions in any concentration do not influence the formation of the precipitate. The precipitate can be weighed out after drying, as its composition is strictly constant. But for exact determinations of small amounts of cadmium the precipitate is iodometrically titrated. The titration is based on the equation:

Card 3/4

Dialkyl and Diaryl Dithiophosphoric Acids as Analytical Reagents. Communication 4. Separation of Cadmium From Zinc and Other Elements. Gravimetric and Titrimetric Determination of Cadmium 75-13-3-10/27

$$\left[(C_2H_5O)_2PSS\right]_2Cd + 16J_2 + 42\ NaOH = 2(C_2H_5O)_2PODNa + 4Na_2SO_4 + 32NaJ + Cd(OH)_2 + 20H_2O.$$

The described gravimetric method can serve for the analysis of natural and technical materials and is also suitable for production control. The performance of the analysis is described. There are 1 figure, 4 tables, and 52 references, 36 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 10, 1956

1. Cadmium--Determination

Card 4/4

5(2), 5(3)

AUTHORS: Busev, A. I., Ivanyutin, M. I. SOV/75-13-6-4/21

TITLE: Dialkyl and Diaryl Dithiophosphoric Acids as Analytical Reagents (Dialkil- i diarilditiofosfornyye kisloty kak analiticheskiye **reaktivy**) Communication VII. Ammetric and Visual Titration of Lead With Nickel Diethyl Dithiophosphate in the Presence of Barium, Calcium, Zinc and Other Elements (Soobshcheniye VII. Amperometricheskoye i vizual'noye titrovaniye svintsa pri pomoshchi dietilditiofosfata nikelya v prisutstvii bariya, kal'tsiya, tsinka i drugikh elementov)

PERIODICAL: Zhurnal analiticheskoy khimii, 1958, Vol 13, Nr 6, pp 647-652 (USSR)

ABSTRACT: The anions of the dialkyl and diaryl-dithiophosphoric acids are not reduced on a dropping-mercury cathode and on a rotary platinum microcathode. It is therefore possible to determine by ammetric titration on the basis of the cathode current only those ions that are reduced on the electrodes mentioned. It was, however, proved that the anions of the diaryl-dithiophosphoric acids are oxidized on a dropping-mercury anode and on a rotary platinum microanode (Ref 1). Between the current intensity and the concentration of dialkyl-

Card 1/4

Dialkyl and Diaryl Dithiophosphoric Acids as Analytical Reagents. Communication VII. Ammetric and Visual Titration of Lead With Nickel Diethyl Dithiophosphate in the Presence of Barium, Calcium, Zinc and Other Elements

SOV/75-13-6-4/21

dithiophosphate ($<$ 1 mmol per l) there is a rectilinear proportionality on oxidation on a dropping-mercury anode. On this oxidation the following reactions take place:

$2\ Hg \longrightarrow Hg_2^{2+} + 2\ e\ ;\ \ Hg_2^{2+} + 2\ [SP(S)(OR)_2]^- \longrightarrow Hg[SP(S)(OR)_2]_2 +$ $+ Hg$. The mercury electrode does thus not behave as an indifferent electrode. The half-wave potential in the oxidation of dialkyl-dithiophosphates on a dropping mercury anode becomes more negative with increasing molecular weight of the radical which is probably related with a decreasing solubility of the corresponding dialkyl-dithiophosphates of mercury. On a platinum microanode the following reaction takes place: $2\,[SP\ (S)(OR)_2]^- \longrightarrow (RO)_2P(S)SS(S)P(OR)_2 + 2\ e$.

In the present paper an ammetric method of the titration of lead with a solution of nickel diethyl-dithiophosphate in the presence of the alkaline-earth metals and many other elements

Card 2/4

Dialkyl and Diaryl Dithiophosphoric Acids as Analytical Reagents. Communication VII. Ammetric and Visual Titration of Lead With Nickel Diethyl Dithiophosphate in the Presence of Barium, Calcium, Zinc and Other Elements

SOV/75-13-6-4/21

is devised. A rotary platinum microanode at a potential of +0.8 V is employed accordingly. In this connection the composition of lead diethyl-dithiophosphate was investigated. It corresponds to the formula $[(C_2H_5O)_2PSS]_2Pb$ which is in accordance with publications (Refs 4-6). For the solubility of the precipitation in water at 22-24° a value of $1.3 \cdot 10^{-4}$ mol/l was found (solubility product $Sp = 8.6 \cdot 10^{-12}$). The applicability of ammetric titration of lead according to this method in the presence of alkaline-earth metals is very important, because the separation of these elements from lead is very difficult. The titration is carried out in 0,1-1 n nitric acid solution. Furthermore, a visual method of the titration of lead with nickel diethyl-dithiophosphate was devised. During the titration the solution above the precipitate is turbid and becomes clear only by shaking. The final point can easily be determined by the fact that the first excess drop of the reagent does no longer cause any turbidity. The

Card 3/4

Dialkyl and Diaryl Dithiophosphoric Acids as Analytical Reagents. Communication VII. Ammetric and Visual Titration of Lead With Nickel Diethyl Dithiophosphate in the Presence of Barium, Calcium, Zinc and Other Elements

SOV/75-13-6-4/21

concentration of HNO_3 exerts within wide limits (0.01-4 n) no influence upon the results of titration, if urea is added to the solution to be titrated. Chloride ions in quantities that do not cause any precipitation of $PbCl_2$ do not interfere with. This is an excellent method due to its simple performance although it lasts somewhat longer than most of the usual methods of titration. Both methods devised supply very accurate results. There are 3 tables and 15 references, 10 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 10, 1956

Card 4/4

5(2), 5(3) SOV/75-14-2-19/27

AUTHORS: Busev, A. I., Ivanyutin, M. I.

TITLE: On the Reaction of the Oxidation of Dialkyl- and Diaryldithiophosphates With Iodine and Their Titrimetric Determination (O reaktsii okisleniya dialkil- i diarilditiofosfatov yodom i ikh titrimetricheskom opredelenii)

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 2, pp 244-245 (USSR)

ABSTRACT: The investigations carried out by the authors showed that in the oxidation of dithiophosphates with an iodine excess in alkaline solution well reproducible and very accurate results are obtained. In this connection 1 mol of nickel-diethyldithiophosphate consumed 16 mols of iodine. Similar results were obtained also with pyridine-diphenyldithiophosphate. The iodine consumption for the oxidation of different amounts of nickel-diethyldithiophosphate is tabulated. From these results the following equations for the oxidation of dithiophosphates with iodine in highly alkaline solution are ascertained: $(RO)_2PSS^- + 16\ J_2 + 40\ OH^- = (RO)_2POO^- + 4SO_4^{2-} + 32\ J^- + 20\ H_2O$.

R denotes an alkyl- or aryl radical. The oxidation of nickel-diethyldithiophosphate takes place rapidly in a highly alkaline solution. A change of the alkali concentration within the

Card 1/3

SOV/75-14-2-19/27

On the Reaction of the Oxidation of Dialkyl- and Diaryldithiophosphates With Iodine and Their Titrimetric Determination

limits of 0.5 - 1.5 n influences only the rate of the reaction and not the iodine consumption. In 1 n alkaline solutions the complete oxidation of nickel—diethyldithiophosphate takes 5 - 10 minutes. Iodine consumption does not depend on its excess. The order of the addition of lye and iodine influences the consumption of iodine only if the iodine excess is immediately titrated back with thiosulphate solution. If the solution is kept for ten minutes the order of the addition of lye and iodine is of no importance. The reaction described makes it possible to determine small amounts of dithiophosphates with high accuracy. The method is especially valuable if dithiophosphate has a low melting point, and, therefore, cannot be dried at 105° (dithiophosphates of lead, bismuth etc). The method devised was used for the determination of cadmium. The determination is described in detail in this paper. The results of the titrimetric determinations are tabulated. The determination error is ±0.5% and is higher only in individual cases (~ 2%). The results of the determination of nickel, cadmium, lead, bismuth, and indium according to this method are summarized in a table. There are 3 tables and 2 Soviet

Card 2/3

On the Reaction of the Oxidation of Dialkyl- and Diaryldithiophosphates With Iodine and Their Titrimetric Determination

SOV/75-14-2-19/27

references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: December 17, 1957

Card 3/3

AUTHORS: Busev, A.I., Ivanyutin, M.I. Feygina, E.M. 32-3-3/52

TITLE: A Colorimetric Method of Determining Copper in Nickel Electrolytes (Kolorimetricheskiy metod opredeleniya medi v nikelevykh elektrolitakh)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 3, pp. 265-266 (USSR)

ABSTRACT: A method for the rapid colorimetric determination of copper was developed on the basis of the reaction of the Cu^{2+} ion in a weakly acid medium with nickeldiethyldithiophosphate, for hereby the copperdiethylkithiophosphate of deep yellow-orange color, which is extracted in the course of the analysis mentioned with carbon tetrachloride, and which is unsoluble in water but is soluble in any organic solvent, is produced. The nickeldiethyldithiophosphate can be produced by the method developed by A.I. Busev and M.I. Ivanyutin [Refs.1 and 2], and will within short be available from the All-Union Scientific Research Institute for Reagents; it will be added to the extract in form of a 0.001 molar solution. A standard sample serves the purpose of comparing colors (0.02 mg/Cu/1 ml) and the final result is computed according to a formula. Also the sample investigated should not contain more than 2 mg/l copper, because otherwise the colorless Cu^{+} diethyldithiophosphate is produced and the accuracy of the method is impaired. There are 2 tables, and 1 reference, 1 of which is Slavic.

ASSOCIATION: Moscow State University imini M.V.Lomonosov, Central Institute for Aviation Lubricants

~~Card 1/2~~

BUSEV, A.I.; IVANYUTIN, M.I.

Dialkyl-and diaryldithiophospohric acids as analytical reagents. Report No. 8: Interaction of dialkyl- and diaryldithiophosphoric acids with ions of elements. Trudy kom. anal. khim. 11:172-191 '60. (MIRA 13:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Phosphorodithioic acid) (Chemical tests and reagents)

BUSEV, A.I.; IVANYUTIN, M.I.

Nickel deithyldithiophosphate. Met. poluch. khim. reak.
i prepar. no.6:33-35 '62. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet.

IVANYUZHENKO, P. I., inzh.; LAVRIKOVA, N. A., inzh.

Check of the contactors of the MKP-160 oil-filled switch without opening the drum. Energetik 12 no.4:14-15 Ap '64. (MIRA 17:7)

IVANYY, P.; KORZHINEK, I.; UYGEL'NOVA, M.; IVANYY, I.

Significance of the antiglobulin reaction in clinical and experimental immunohematology. Probl.gemat.i perel.krovi no.11:24-36 '62. (MIRA 15:11)

1. Iz oblastnoy stantsii perelivaniya krovi (zav. A. TSzambelova) v g. Nirta i Instituta gematologii i perelivaniya krovi (dir. - prof. Ya. Gorzheyshi) v Prage.
(IMMUNOHEMATOLOGY) (GAMMA GLOBULIN)

IVANYY, P.; KORZHINEK, I.; UYGEL'NOVA, M.; IVANYY, I.

Significance of the antiglobulin reaction in clinical and experimental immunohematology. Probl.gemat.i perel.krovi no.11:24-36 '62. (MIRA 15:11)

1. Iz oblastnoy stantsii perelivaniya krovi (zav. A. TSzambelova) v g. Nirta i Instituta gematologii i perelivaniya krovi (dir. - prof. Ya. Gorzheyshi) v Prage.

(IMMUNOHEMATOLOGY) (GAMMA GLOBULIN)

IVARBEYEV, A., kladovshchik kommercheskogo skalada (Magadan).

Unclaimed cargo. Grazhd. av. 17 no.8:33 Ag '60. (MIRA 13:9)
(Aeronautics, Commercial--Freight)

IVARG, E.

~~KVARG,~~ E

~~IVARG, E.~~; ~~KRISPINSKY, P.~~

TECHNOLOGY

periodicals, RUDY Vol. 6, no. 7, July 1958

KRISPINSKY, P.; IVARG, E. Roasting an iron spar in the Ignis furnaces. p. 241.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 5
May 1959, Unclass.

IVAROVSKIY, A.V., gornyy inzh.

Using divided charges during underground blasting operations in the "Mainskiy" Mine. Vzryv. delo no.54/11:386-390 '64. (MIRA 17:9)

1. Mainskoye rudoupravleniye.

BORODIN, I.V., prof.; SHCHERBININ, N.P.; IVAROVSKIY, P.S.

Weed control in the fields of Siberia. Zemledelie 24 no.7:74-75 Jl '62. (MIRA 15:12)

1. Novosibirskiy sel'skokhozyaystvennyy institut.
(Siberia, Western--Weed control)

IVARSSON, B.

POLAND/Chemical Technology - Chemical Products and Their Application, Part 4. - Cellulose and Its Derivatives, Paper. H-33

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 49019

Author : A.P. Arlov, B. Ivarsson

Inst : -

Title : Effect of Paper Sheet and Drying Felt Tension on Mechanical Properties of Paper.

Orig Pub : Przegl. papiern., 1957, 13, No 5, 152-158, 3 (obl).

Abstract : The effect of the drying regime of paper sheet and drying felt tension on the mechanical properties of paper was studied. The installation for, and the methods of, experimenting are described.

Card 1/1

5

GIMZAUSKAS, J., med. m. kand.; BLOCHAS, C. med. m. kand.; IVASAUKAS, H.

A severe and rare case of non-specific ulcerative colitis. Sveik. apsaug. no.7:18-20 '62.
(COLITIS ULCERATIVE)

IVA[illegible]SCANU, ST,

H-8

RUMANIA/Chemical Technology - Chemical Products and Their Applications. Elements, Oxides, Mineral Acids. Bases, Salts.

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, 8607

Author : Ciochina I., Ivascanu St., Ibanescu I.

Inst : Jassy Polytechnic Institute.

Title : New Method for Obtaining the Permanganate-Ion. Directly from Ore. III.

Orig Pub : Bul. Inst. politehn. Iasi, 1956, 2, No 1-2, 103-114

Abstract : Permanganate-ion is obtained directly from manganese ore by fusion of the ore with KOH, utilizing for further conversion to $HMnO_4$ the $CaCl_2$ byproduct of the production of $KClO_3$. From 100 kg manganese ore are obtained, accordingly, 60 kg $KMnO_4$. Use is made of a simplified oxidative fusion, since availability of special equipment for

Card 1/2

TANASESCU, Gheorghe (Timisoara); IVASCHESCU, Ion (Timisoara); SIRIANU, Eftimie (Timisoara); ROCHIANU, Dumitru (Timisoara)

Aspects of specialization of production at the Electromotor enterprise in Timisoara. Electrotehnica 11 no.8:285-293 Ag'63.

1. Colectiv de la Catedra de economie politica a Institutului Politehnic, Timisoara.

CEAUSESCU, Elena; BITTMANN, Silvia; FIEROIU, Victoria; FLORESCU, Isabela;
IVASCU, Cornelia

Influence of the impurities in the monomer in the stereospecific polymerization of the isoprene. Studii cerc chim 14 no.3:271-277 Mr '65.

1. Institute of Chemical Research, Bucharest, 202 Splaiul Independentei. Submitted July 28, 1964.

CEAUSESCU, Elena; BITTMAN, Silvia; FIEROIU, Victoria; FLORESCU, Izabela;
IVASCU, Cornelia

Influence of impurities in the monomer in the stereospecific polymerization of the isoprene. Rev chimie Roum 10 no.3:293-299 Mr '65.

1. Chemical Research Institute of the Ministry of Petroleum and Chemical Industry, Bucharest. Submitted July 28, 1964.

DAVID, Ioan, ing.; SABO, Elena, ing.; PUVAK, I.; IVASCU, I.; MORARIU, Mircea, ing.

Reserves of reduction of the consumption of construction materials. Problems econ 18 no.1:165-167 Ja '65.

1. Director General, Tirnaveni Chemical Trust (for David). 2. Head of the Service of Technical Quality Control (for Sabo). 3. Director, "Grivita" Metallurgic Plant, Bucharest (for Puvak). 4. Chief Engineer, "Grivita" Metallurgic Plant, Bucharest (for Ivascu). 5. Director, Directorate of Systematization, Architecture, and Construction Projects, Brasov region People's Council (for Morariu).

21(10) RUM/2-11-4-10/44

AUTHOR: Ivaşcu, M.

TITLE: Photographic **Technique** in Nuclear Physics (Tehnica fotografică în fizica nucleară)

PERIODICAL: Ştiintă şi Tehnică, Seria a II-a, Vol 11, Nr 4, pp 12-13 (RUM)

ABSTRACT: This article deals with tracks produced by ionizing particles on photographic emulsions. First, the author gives a brief historical survey on the use of photographic plates for determining the type of nuclear radiation and enumerates the ingredients of a modern nuclear emulsion. He then explains how tracks are produced in the nuclear emulsion and describes the methods of determining these tracks. There is 1 photo and 1 sketch.

ASSOCIATION: Institutul de fizică atomică (Institute of Nuclear Physics)

Card 1/1

IVASCU, M.

19 8

Absolute measurement of thermal neutron flux intensities. Horia Hulubei, C. Beşliu, Al. Berinde, M. Ivaşcu, and N. Martalogu. *Acad. rep. populare Romîne, Inst. fiz. atomica si Inst. fiz., Studii cercetări fiz.* 10, 223-8 (1959); cf. Locqueneux, *C.A.* 44, 5717*g*; Huenny, *C.A.* 45, 5520*c*; Mercier, *C.A.* 48, 1822*d*.—NIKFI nuclear emulsions are impregnated with $Li_2B_4O_7$, and B and Li concns. are detd. with 1% accuracy. A Ag sheet between the channel and the emulsions eliminates the resonance component. Several layers of the emulsion are successively exposed to the flux, at different time intervals *t*. The slope of the graph representing the superficial d. of the tracks due to B as a function of irradiation time, enables detn. of the abs. value of the thermal neutron flux. Accuracy achieved is 3%, and the method has been verified for neutron fluxes emerging from a reactor channel, as well as from a 1-c. Po-Be source. A new method of layer scanning enables control of the accuracy of the measurement. M. Lapidot

HULUBEI, H., acad.; MARTALOGU, N.; IVASCU, M.; BESLIU, C.; BERINDE, A.;
NEAMU, I.; FRANZ, I.

Angular distribution of the protons of 6.2 MeV, elastically and nonelastically diffused on S^{32}. Studii cerc fiz 11 no.4:1023-1031 '60. (EEAI 10:8)

1. Institutul de fizica atomica, Bucuresti. 2. Comitetul de redactie, Studii si cercetari de fizica, redactor responsabil(for Hulubei).
(Angular momentum(Nuclear physics)) (Protons)
(Nuclear emulsions) (Sulfur) (Radioisotopes)

MARTALOGU, N.; SCINTEIE, N.; MOLEA, M.; NEAMU, I.; IVASCU, M.

The scintillation recoil spectrometer with two crystals. Studii cerc fiz 12 no.3:693-706 '61.

1. Institutul de fizica atomica, Bucuresti.

(Scintillation spectrometry)

HULUBEI, H., acad.; MARTALOGU, N.; BESLIU, C.; IVASCU, M.; BERINDE, A.

Inelastic diffusion of the neutrons of 5,2 Mev. over As.
Comunicarile AR 12 no.2:141-147 F '62.

1. Institutul de fizica atomica, Bucuresti.

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B104/B102

24 6610

AUTHORS: Hulubei, H., Neamu, I., Franz, I., Martalogu, N., Scîntei, N., Ivascu, M., Berinde, A.

TITLE: Scattering of low energy proton from S^{32}

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 6, 1962, 1433 - 1437

TEXT: Experiments were carried out with the У-120 (U-120) cyclotron of the Institute of Atomic Physics in Bucharest. Protons of 5.70, 5.85, 6.02, 6.20 and 6.34 Mev with an energy spread of 150 kev were focused into a scattering chamber with a tantalum tube. 4 diaphragms in this tube reduced the diameter of the incident particle beam to 4 mm. The vacuum sputtered S^{32} target had a surface area of 4 cm^2 and a thickness of less than 2 mg/cm^2. The sensitivity of the angular distributions of inelastically scattered protons to the incident proton energy (Fig. 2) indicates the formation of a compound nucleus. The asymmetry of the distribution curve may be explained by direct interaction. The angular distribution curves of

Card 1/3

2

Scattering of low energy proton from S^{32} S/056/62/042/006/001/047
B104/B102

elastically scattered protons show that the reaction mechanism via compound nucleus formation in elastic processes with $E_p \simeq 6.02 - 6.34$ Mev plays an increasingly important role. There are 4 figures.

ASSOCIATION: Institut atomnoy fiziki Akademii nauk Rumynskoy Narodnoy Respubliki Bukharest (Institute of Atomic Physics of the Academy of Sciences of the Rumanian People's Republic, Bucharest)

SUBMITTED: November 12, 1961

Card 2/3

HULUBEI, H., acad.; NEAMU, I.; FRANCZ, I.; MARTALOGU, N.; SCINTEI, N.;
IVASCU, M.; BERINDE, A.;

Diffusing protons with 4,90 and 5,30 Mo V energy on aluminum.
Studii cerc fiz 14 no.6:741-745 '63.

1. Institutul de fizica atomica, Bucuresti.

KHULUBEY, Kh. [Hulubei, H.]; FRANTS, Zh. [Francz, J.]; MARTALOGU, N.;
SKYNTEY, N. [Scintei, N.]; IVASHKU, M. [Ivascu, M.]; BERINDE, A.;
NYAMU, I. [Neamu, I.]

Proton scattering on Ne^{20} at energies below 5 Mev. Zhur. eksp. i teor. fiz. 45 no.6:1822-1826 D '63. (MIRA 17:2)

1. Institut atomnoy fiziki, Rumyniya, Bukharest.

IVASCU, V. (Bucuresti)

"State of the animal pests of the plants cultivated in 1957-1958 and 1958-1959" by C. Manolache, Fl. Manolache, C. Hrisafi, I. Catuneanu, M. Hamar, Gh. Boguleanu, A. Savescu, D. Balaj, N. Iacob, V. Ceianu, and I. Petrescu. Reviewed by V. Ivascu. Natura Biologie 16 no.4: 82-83 Jl-Ag '62.

ROMASCU, Em. (Bucuresti); IVASCU, V. (Bucuresti); GANESCU, A.
(Bucuresti)

A little known pest, the sunflower tailor (Agapanthia dahli
Richt.). Natura Geografie 12 no. 6:85-87 N-D '60.

IVASCU, V

IVASCU, V.; TANACH, V.

IVASCU, V.; TANACH, V. Permanent magnets on the base of barium ferrite. p. 447

Vol. 4, no. 10, Oct. 1956
ELECTROTEHNICA
TECHNOLOGY
Rumania

So: East European Accession, Vol. 6, No. 5, May 1957

IVASCU, VASILE

RUMANIA/Magnetism - Ferrites and Ferromagnetism F-6

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 15794

Author : Ivascu Vasile, Tanash Valentin
Inst : Not Given
Title : Magnetically-Soft Materials Based on Ferrites

Orig Pub : Electrotehnica, 1957, 5, No 9, 290-299

Abstract : Survey. Bibliography, 13 titles.

Card : 1/1

27

IVASCU, VASILE

Distr: 4E2c(m)

14 7 5

/ Anisotropic permanent magnets of Br ferrite. Vasile Ivascu, Mihai Rosenberg, and Lucia Cristea [illegible] MJC. [illegible]

four times as great
as that of the current isotropic magnet. R. A. Salford

86717
R/004/60/000/007/002/002
A231/A026

9.4300 (3203, 1047 [illegible])
9.7140
15.2210 1275 1145, 1136

AUTHORS: Ivascu, Vasile, Engineer, Chief of Laboratory; Rozemberg, Mihai, Candidate of Sciences, University Lecturer; Tanach, Valentin, Engineer, Researcher; and, Cirlan, Lucia, Engineer, Chief Researcher; (Bucharest)

TITLE: Magnetic Ferrite Cores for Application in Radioengineering, Automation and Telecommunications. (Ferrites With Rectangular Hysteresis Loops)

X

PERIODICAL: Electrotehnica, 1960, No. 7, pp. 247-254

TEXT: The authors present the results of some studies conducted at the ICET (Electric Engineering Research Institute) with regard to the production of netic oxide materials (ferrites) with a rectangular hysteresis loop, to be automatic telephone exchanges, etc. The ICET in- of memorizing and switch

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Magnetic Ferrite Cores for Application in Radioengineering, Automation and Telecommunications. (Ferrites With Rectangular Hysteresis Loops)

the B_m maximum induction and the B_r/B_s ratio, but reduces the coercive force. An exception could be found at the H (I) composition after slow cooling. The characteristics of the cores are also depending on their dimensions. The values of the initial permeability of the cores produced (Table 3) are a direct consequence of the property of composition and treatment. The μ_i value drops with the increase of the MnO content from the "H" composition to the "HA" composition via the "V" composition. With the "H" composition, μ increases with the growing treatment temperature, or with the duration of the treatment. "HA", type IV, and "V", type II cores treated at 1,350° for 5 hours and then cooled rapidly, proved to be the best materials for memorizing and switch cores. In function of their application for which the cores with a rectangular hysteresis loop are determined, the following parameters are decisive for obtaining good performances: composition, shape and size of the cores, and heat treatment conditions. There are 10 figures, 5 tables, and 7 references: 3 Soviet, 3 English, 1 French.

ASSOCIATION: ICET (El. Engineering Research Institute), (Ivaşcu, Tanach, Cirlan); Universitatea "C.I. Parhon" (University) (Rozemberg)

SUBMITTED: February 25, 1960

Card 3/3

20367

9,4300 (1158, 1137, 1147)

R/004/61/000/004/001/001
D014/D106

AUTHORS: Fugaru, Constantin, Metallurgical Researcher, and Ivaşcu, Vasile, Engineer, Principal Chemical Researcher, (Bucharest)

TITLE: Production of oxide magnets based on barium ferrite and lead

PERIODICAL: Electrotehnica, no. 4, 1961, 124-129

TEXT: The article briefly describes some experiments conducted to obtain a high-quality oxide magnet based on barium ferrite and lead. During the last few years, many studies were conducted with the Fe_2O_3 - BaO - PbO compound system, to find a material having some magnetic properties similar to those of oxide magnets based on barium ferrite with a $(BH)_{max}$ energy of $8 \cdot 10^3$ $\mathcal{J}/m^3$ ($1 \cdot 10^6$ GsÖe). Magnetoplumbite, PbO $6Fe_2O_3$, is a ferromagnetic compound similar to barium ferrite. The PbO - Fe_2O_3 system was studied by E. Kohlmeyer (Ref 1: Studiul fazelor în sistemul PbO - Fe_2O_3. Metall und Erz, 1, 1913, 483 - 491), who established the phases which are produced by different treat-

20367
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D014/D106

Production of oxide magnets based on barium ferrite and lead

ments. Pawlek (Ref. 2: W. Berger, F. Pawlek: Cercetări cristalografice şi magnetice în sistemul PbO - Fe_2O_3. Archiv für das Eisenhüttenwesen, 2, 195 (?), febr. 101 - 108) has studied the compositions where the most favorable values of the magnetic parameters appear. /Abstracter's note: the last digit of the year mentioned in Ref 2 is illegible/. Magnetoplumbite as well as barium ferrite are ferromagnetics which present values very close to the magnetic saturation moment, which is due to their isomorphism and the slight difference between the Ba^{2+} and Pb^{2+} ion rays (1.43 and 1.32). It can be assumed that the solid solutions of these two combinations will also be ferromagnetic, giving relatively high values of the magnetic saturation moment and of the constant K of the magnetocrystalline anisotropy. The formation of barium ferrite from Fe and Ba oxides is accomplished more rapidly at temperatures over 950 °C. Magnetoplumbite begins forming at a temperature of 825 °C. It can be assumed that the barium ferrite formation rate will increase if the chemical reaction and the sintering are accomplished together with lead oxide. If $\frac{PbO}{Fe_2O_3} < 1.5$,

Card 2/ 20

20367

R/004/61/000/004/001/001
D014/D106

Production of oxide magnets based on barium ferrite and lead

the phase is formed at $825^{\circ}C$ at an increased reaction rate. By the diffusion of barium and lead ions, a mixed ferrite is obtained with determined magnetic properties. In the investigations, the $\frac{PbO}{Fe_2O_3}$ molar ratio gradually increased up to approximately 1/10, suggesting that magnetoplumbite is formed at temperatures higher than $825^{\circ}C$, accelerating the formation of barium ferrite. The experiments included production of some samples of materials having the chemical composition shown in table 1, magnetic measurings and microscopic study of the samples produced. The PbO content of the samples varied between 1 and 10% in weight. The following raw materials were used: Industrial red iron oxide with a content of Fe_2O_3 94%, humidity 1.4%, P. C. 3.6%, insolubles 0.3%, S 0.7%; industrial barium carbonate, BaO 76%, CaO 0.6%, Na_2O 0.4%, SO_3 0.7%, P. C. 22.3%; minium of lead, grade I- a, PbO 95.4%. The samples were prepared as follows: the raw materials were mixed for 24 hrs in a ball mill together with an equal quantity

Card 3/20

20367

R/004/61/000/004/001/001
D014/D106

Production of oxide magnets based on barium ferrite and lead

of water and steel balls. The mixed material was then filtered and dried in a drying chamber. The dried powder samples designated with no. I were subjected to a preliminary heat treatment (pre-sintering) for 2 hrs at 950°C, whereas the samples designated with no. II were subjected to a preliminary heat treatment for 4 hrs. The ferrite obtained was ground for 48 hrs in a ball mill together with the same quantity of water and steel balls. The resulting fine ferrite powder was mixed with 4 - 8% of cellulose trimethyl or polyvinyl alcohol and compressed with a pressure of 0.8 t/cm into cylindrical shapes 16 mm in diameter and weighing 10 g each. Having been dried, the samples were subjected to a sintering process at a temperature of 1,100°C in case of the "a" index and at 1,150°C in case of the "b" index. The samples were kept for ½, 1, and 2 hrs in the furnace. The temperature was increased at a rate of 200°C per hr, whereas the cooling was accomplished at 300°C per hr. The dimensions, the density and the magnetic performances /Br, Hc, $(BH)_{max}$7 of the samples were determined. The magnetic performances were determined with a Neumann double-yoke permeameter, made by the ICET. /Abstracter's note: the abbreviation ICET

Card 4/20

20367

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D014/D106

Production of oxide magnets based on barium ferrite and lead

is not explained]. The values obtained for different samples are compiled in tables 2 - 5]. The mixed barium and lead ferrite, after the preliminary sintering for 2 and 4 hrs at 950°C, showed an increase in density in relation to an increase of the PbO content as well as to the duration of the maximum temperature level. According to fig 2, this increase can practically be considered to be linear. Figures 2 - 7 show the influence of the variation in PbO content between 3 and 10%, the duration of the preliminary heat treatment, the maximum temperature, and the duration of this temperature level on the final density of the sample. The final density is not considerably increased if the PbO content exceeds 6%. Similarly, an increase in the maximum temperature or the time above the limits shown in the graphs in fig 2 - 7, does not lead to an improvement in the final density. The influence of the heat treatment on the magnetic performances of different types of samples is shown in figures 8 - 11. Samples having a PbO content of 1% were eliminated because of their very low magnetic performance. The materials having a PbO content of 3% showed a weak reaction after the preliminary

Card 5/20